Mobile Digital Surveillance System Application

zito1300 Mobile DVR System

Hardware User's Manual

2nd Edition, 2007

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For more information, technical support and service about this zito1xxx mobile DVR series, please contact your supplier where you have purchased from.

This manual is for zito1300 mobile DVR series. (2st Edition, 2007)

Announcement

This user's manual is only written for the zito mobile DVR hardware product with supporting Windows based operating system use. The appropriate models for this user's manual are in the following list.

- zito13xx
- zito13xxP

Limited Warranty

This product is warranted against manufacturing defects for the period of one year. The warranty period commences on the date of purchase from the authorized reseller/retailer. Your original purchase invoice, showing the date of purchase of the product is your proof of the date of purchase.

During the warranty period, defective parts will be repaired or replaced. There will be no charge for labor or parts during the one-year warranty period from the date of purchase. Any shipping or other cost such as customs incurred costs, etc… which is at customers' responsibility.

This warranty does not cover any failure resulting in loss to software, data, lost profits, lost savings, any incidental damages or other economic consequential damages due to accident, abuse, misuse, negligence and acts of God.

Safety Notice

We make no warranties with respect to this documentation and disclaim any implied warranties of merchantability and fitness for a particular purpose.

We shall not be liable for any error or for incidental or consequential damages in connection with the furnishing, performance, or use of this documentation or the examples herein. The information in this documentation is subject to change without notice.

1. This equipment should not be exposed to water or other liquids.

2. Do not cover the openings; the openings on the equipment are for air convection hence protects the equipment from overheating.

3. Do not attempt to remove the cover of this equipment.

4. If any of the following situations arises, have the equipment checked by an authorized service personnel:

The USB connector is damaged.
The power cord or connector is damaged.
Liquid has penetrated into the equipment.
The equipment has obvious sign of breakage.

Packing List

Before you begin installing your unit, please make sure that the following materials have been shipped:

- 1 x zito1300 series mobile DVR
- 1 x Utility CD (User's Manual & Drivers)
- 1 x DVR software utility CD
- 1 x Cable set (3 pieces)

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Additional Information

Contact your distributor, sales representative, or customer service center for technical support if you need additional assistance.

Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (eg. operating system, version, and application software,… etc.)
- A complete description of the problem
- The exact wording of any error messages

FCC (Class B)

This device complies with the requirements in part 15 of the FCC rules: Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

This equipment has been tested to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this device in a residential area is not likely to cause harmful interference. The user is advised that any equipment changes or modifications not expressly approved by the party responsible for compliance would void the compliance to FCC regulations and therefore, the user's authority to operate the equipment.

There is a danger of a new battery exploding if it is incorrectly installed. Do not attempt to recharge, force open, or heat the battery. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instructions

Contents

Chapter 1 Introduction **8**
Chapter 2 Hardware Functional Specification **14**
2.1 Zito1300 series hardware outlook 14
2.2 External I/O Connectors 15
2.3 Connectors Description 16
2.4 IDE Hard Drive Connector 20
2.5 Solid State Disk 23
2.6 Audio Interface 23
2.7 COM Port Connector 23
2.8 VGA Interface Connections 23
2.9 Ethernet Configuration 23
2.10 USB Connectors 24
Chapter 3 Chipset Software Installation Utility **25**
3.1 Announcement 25
3.2 Introduction 25
3.3 Installation Guide 26
Chapter 4 VGA/LCD Setup **30**
4.1 Introduction 30
4.2 Installation of the VGA Driver 31
4.3 Further Information 35
Chapter 5 Audio Setup **36**
5.1 Introduction 36
5.2 Driver Installation 36
5.3 Further Information 40
Chapter 6 LAN Interface **41**
6.1 Introduction 41
6.2 Installation of Ethernet Driver 41
6.3 Further Information 47
Chapter 7 Wireless LAN Interface **48**
7.1 Introduction 48
7.2 Installation of Wireless LAN Driver 48
7.3 Further Information 50
Appendix A **51**
Appendix B **56**
Appendix C **57**
Appendix D **59**

Chapter 1 Introduction

1.1 Introduction

The zito 1300 Windows O/S based mobile digital video recorder series provides the best mobile DVR solution in today's DVR market. It is the smallest in vehicle x86 open platform supporting up to 8 channels video inputs for various transportations in the current market. The zito is specially designed with fan less solution to meet harsh environment such as sustaining extreme shock and vibration. By introducing some key features, such as using multilock connector, removable HDD, and having embedded Wi-Fi wireless networking interface for easy and convenience usage. Zito series are the best solution in embedded and mobile application for current and future market.

1.2 Key Features

1.2.1 Vehicle Use

- 12/24 VDC power ready
- Durability in harsh environment

1.2.2 DVR System

- Up to 8 channels of video input
- Up to 120fps maximum

1.2.3 MultiLock System

- Secure and reliable connector for transportation standard
- Hassle free cable management

1.2.4 Removable HDD

- Quick accessibility
- Easy maintenance

1.2.5 Wireless Network

- PCMCIA socket ready
- Information communicating and update

1.2.6 Power Management

- Battery health and performance monitoring
- Automatically power on/off with delay function

1.2.7 GPS System (optional device and software required)

- Real time vehicle tracking
- Informative announcement

1.2.8 General Propose of Input and Output

- Trigger alarm device setting
- Event setting

1.3 Hardware Specification

1.3.1 Video Capture System

- 4 video inputs for zito1304 series
- 8 video inputs for zito1308 series
- 4 audio inputs
- Composite for NTSC/PAL video standard
- Up to VGA solution at 640(H) x 480(V)
- Maximum capture frame rate at 120/100 (NTSC/PAL)
- RGB connector for video data output

1.3.2 Processor System

- Supporting from Intel ULV Celeron M 800Mhz up to Pentium M 1.4Ghz with low voltage
- Intel 852GM Chipset
- L2 cache ranges from 0 up to 2MB
- Award flash BIOS

1.3.3 Memory

- One 200pin SO-DIMM socket
- Supporting DDR 200/226
- Built in 256MB RAM with up to 1GB.

1.3.4 Graphic

- Chipset integrated VGA controller
- Shared system memory up to 64MB
- Up to 1600 x 1200 @ 85Hz

1.3.5 Ethernet

- Intel® 82562GZ chipset
- Rate speed at 10/100MBps
- IEEE 802.3u (100 Base-T) protocol compatible
- Supporting 802.11 b/g WLAN (zito130xP series only)

1.3.6 Storage

- Supporting 2,5” HDD with removable function
- Build in type II Compact Flash socket

1.3.7 I/O Connector

- 1 x PCMCIA socket (zito130xP series only)
- 1 x WLAN internal (zito130xP series only)
- MultiLock Connectors
  . 1 x VGA (D-Sub)
  . 3 x USB port (USB2.0)
  . 1 x LAN port (RJ-45)
  . 1 x Serial port (RS-232)
  . 1 x Audio in
  . 1 x Audio out
  . 1 x Microphone in
  . 4 x GPIO

1.3.8 Environment

- Relative humidity is in between 10% ~ 95% at 40℃ with non-condensing
- Operating temperature is in between 0 ~ 45℃ in fan less
- Shock is at 20G for operating, 80G for storage and transit
- Vibration is at 1.0G with in between 5 ~ 500Hz

1.3.9 Power

- 12 VDC @ 2A and 24 VDC @ 1A
- Maximum power consumption is at 24W

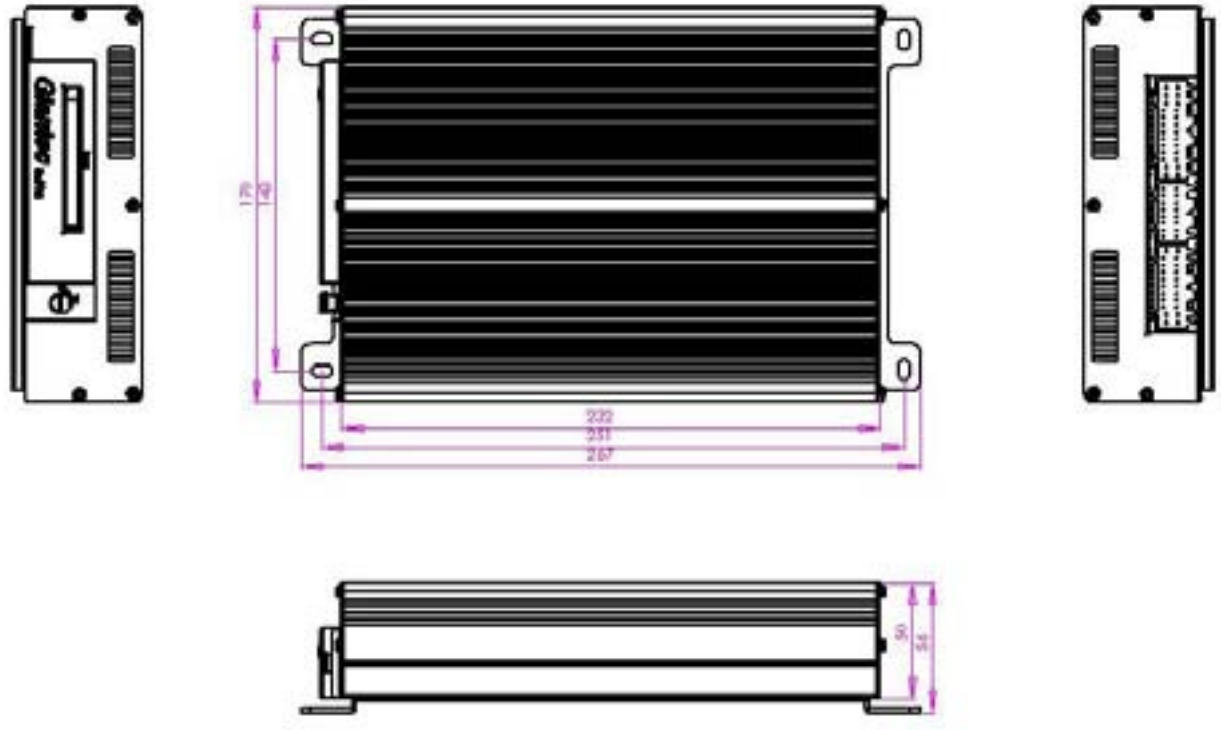
1.3.10 Certification

- CE
- FCC with class B

1.3.11 Mechanical

- Construction is aluminum housing
- Dimension is at 170mm (W) x 50 (H) x 230 (L) / 6.69” x 1.97” x 9.06”
- Net weight is at 2.8kg
- Packaging dimension is at 40cm x 30 x 22
- Packaging weight is at 3.5kg (net) / 4.5kg (gross)

1.4 Dimension Diagram



Chapter 2 Hardware Functional Specification

2.1 Zito1300 series hardware outlook

2.1.1 Front View

2.1.2 Back View

2.2 External I/O Connectors

2.2.1 Zito1304 series

2.2.2 Zito1308 series

2.3 Connectors Description

The zito1300 series external I/O connectors' link to various external devices for instance a CRT monitor, security cameras or USB drives. Those connectors come with a cable set which is aiming for evaluation only. For the best performance and installing, please use the **MultiLock connector** for both ends. The following sections list out each of the external I/O connectors with detail function.

2.3.1 Connector A

zito1304

zito1308

2.3.1.1 Video Input

The zito1304 series come with 4 video inputs where the zito1308 series have got 8 video inputs for connecting surveillance cameras.

2.3.1.2 GPIO (General Propose of Input and Output)

A standard 4 GPIO connectors are ready for trigger alarm device or event settings.

2.3.1.3 Audio Input

Depends on the DVR software, zito1300 series allow users to record up to 4 channels of audio from audio enabled security cameras or external microphone devices.

2.3.1.4 Line Input

This is part of hardware specification for Realtek AC'97 audio line in.

2.3.1.5 Microphone Input

This is part of hardware specification for Realtek AC'97 audio microphone in.

2.3.1.6 Ground Connector

The connector is for connecting ground.

2.3.2 Connector B

2.3.2.1 USB Ports

The zito1300 series provide 3 x external USB port for connecting other USB devices, which gives completed Plug & Play and hot swapping for up to 127 external devices. The USB port interface complies with USB2.0 compliant.

2.3.2.2 Ethernet Connector (LAN Port)

The zito1300 series are equipped with Intel® 82562GZ fast Ethernet controller that is fully compliant with IEEE 802.3u 10/100Base-T CSMA/CD standards. The Ethernet port provides a standard RJ-45 jack connector with LED indicators on the front side to show its Active/Link status (Green LED) and Speed status (white LED).

2.3.3 Connector C

2.3.3.1 Power Input

The power input connector carries out from 9~30 VDC external power input.

2.3.3.2 COM Port

The zito1300 series provide a D-Sub type connector (9 Pin), which offers a standard RS-232 serial communication interface in port of COM1.

2.3.3.3 VGA Port

It provides a high resolution VGA interface with a D-sub 15-pin connector to support a VGA CRT monitor and supports VGA up to 1600 x 1200 @ 85Hz resolution and up to 64MB shared memory.

2.3.3.4 Line Output

This is part of hardware specification for Realtek AC'97 audio line out.

2.4 IDE Hard Drive Connector

The unit provides one IDE channel which allows you to attach to the board's internal controller with one Enhanced Integrated Device Electronics hard disk drives. This advanced IDE controller supports faster data transfer, PIO mode 3, mode 4 and up to UDMA/66.

2.4.1 Connecting Hard Drive

The package includes one 44PIN IDE connector that can connect to a 2.5" hard disk driver.

Step1 Unscrew the locking key by hand or using a screw driver, then push the cover left side to open the cover case.

Step2 Turning the cover case upside down as a tool to slide out the HDD tray.

Step3 Do **MAKE SURE** the HDD pin connector is attaching correctly with the 2.5” HDD.

Correct

Wrong

The pin connector’s edge **MUST NOT** cross over the HDD.

Step4 Sliding the HDD into HDD tray with label is facing up and also using the provided 4 screws to assemble together.

Step5 Placing the HDD tray back into zito unit and close the cover with locking key to complete this installation.

2.5 Solid State Disk

The unit offers a Compact Flash™ card type II socket.

2.5.1 Compact Flash

The Compact Flash card shares a secondary IDE channel which can be enabled or disabled through the BIOS settings.

2.6 Audio Interface

2.6.1 Audio Connector

The zito1300 series provide all major audio signals and it can be optional with Line-in/Line-out/Speaker-out function.

2.7 COM Port Connector

The zito1300 series provide 1 serial port (COM1: RS-232) in DB-9 connector. It provides connections for other serial devices. You can find the pin assignments for the COM port connector in Appendix A.

2.8 VGA Interface Connections

The zito1300 series' VGA interface can drive a conventional CRT display. It has one connector to support display which is for standard CRT VGA monitors. You can find the pin assignments for the VGA port connector in Appendix A

2.8.1 CRT Display Connector

The CRT display connector is a 15-pin D-SUB connector used for standard CRT displays.

2.9 Ethernet Configuration

The unit is equipped with a high performance Ethernet interface which is fully compliant with IEEE 802.3U 10/100Mbps standards. This is supported by all major network operating systems.

2.9.1 100Base-T Connector

100Base-T connections are made through the on-board RJ-45 connector

2.10 USB Connectors

The unit provides 3 x USB (Universal Serial Bus) ports. This gives a complete Plug and Play, and hot attach/detach for up to 127 external devices. The USB interfaces comply with USB specification Rev. 2.0 which supports 480Mbps transfer rate, and are fuse protected. The adapter cable has a 4 x 2-pin connector on one end and a USB connector on the other. The USB interfaces can be disabling from the system BIOS setup.

Chapter 3 Chipset Software Installation Utility

3.1 Announcement

Please pay attention and read the instruction in this chapter very carefully before you are attempting to do any installation in order to enhanced display device drivers and utility software. The device drivers for the zito1xxx series board are located in the software installation CD. The driver CD will guide and link you to the utilities and device drivers under a **Windows system**. The Intel® Chipset Software Installation Utility is not required on any system running Windows XP. Updates are provided via Service Packs from Microsoft.

The files on the software installation CD are compressed. DO NOT attempt to install the drivers by copying the files manually. You MUST use the supplied SETUP program to install the drivers.

Before you are going to perform installation, it is very IMPORTANT to note that most display drivers need to have the relevant software application installed in the system before installing the enhanced display drivers. Additionally, many of the installation procedures will assume that you are familiar with both the relevant software applications and operating system commands. Please review the relevant operating system commands and the applicable sections of your application software's user manual before starting the installation.

3.2 Introduction

The Intel® Chipset Software Installation Utility installs to the targeted system of the Windows INF files which outline to the operating system in how the chipset components will be configured. This is needed for the proper functioning of the following features:

- Core PCI and ISA PnP services
- USB 1.1 support (USB 2.0 driver needs to be installed separately)
- Identification of Intel® chipset components in the "Device Manager"
- Integrates superior video features. These include filtered sealing of 720 pixel DVD content, and MPEG-2 motion compensation for software DVD

1. **This utility is used for the following versions of Windows system, and it has to be installed before performing all other drivers' installation:**
   - **Windows 2000**
   - **Windows XP**
2. **The windows illustrations in this chapter are intended as examples only. Please follow the listed steps, and pay attention to the instructions which appear on your screen.**

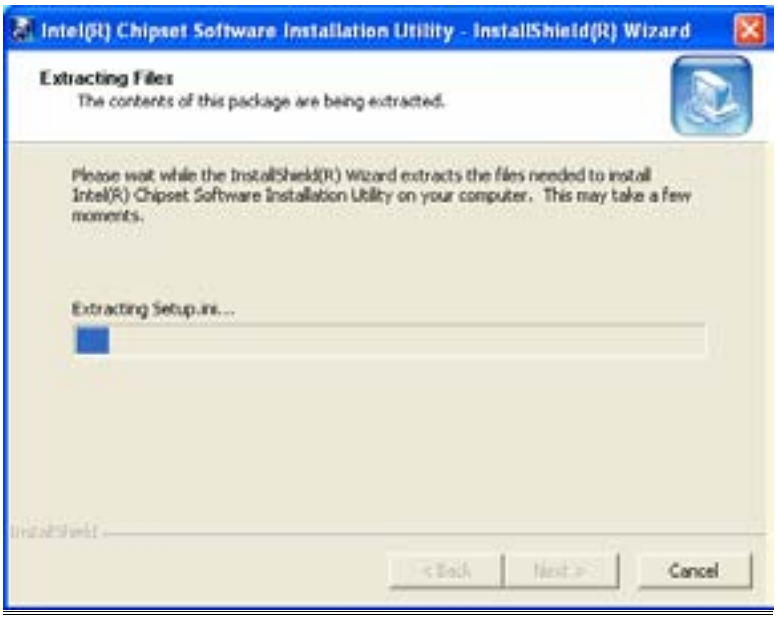
3.3 Installation Guide

3.3.1 Step 1

Insert the driver CD into system's CD-ROM drive. Then click the "System Driver" icon to start installation.

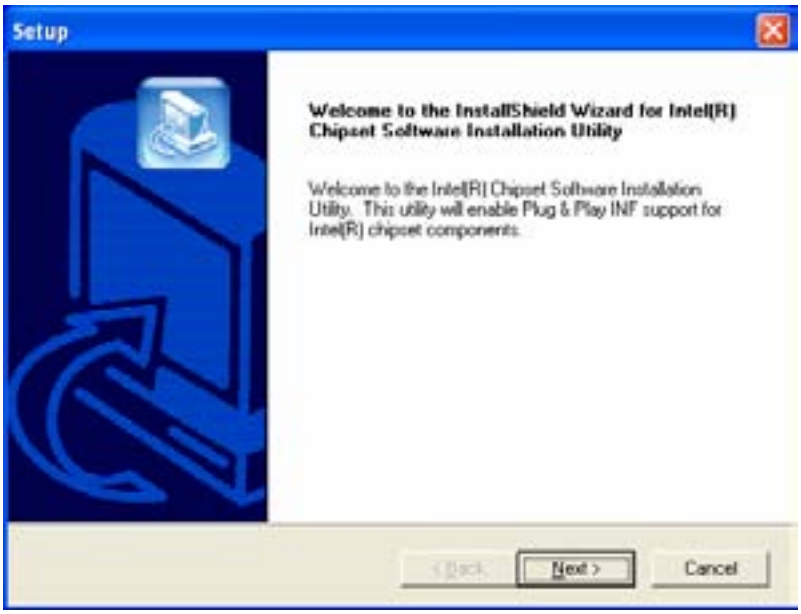
3.3.2 Step 2

The “Install Shield Wizard” appears to begin the installation process.


Intel(R) Chipset Software Installation Utility - InstallShield(R) Wizard
Extracting Files
The contents of this package are being extracted.
Please wait while the InstallShield(R) Wizard extracts the files needed to install Intel(R) Chipset Software Installation Utility on your computer. This may take a few moments.
Extracting Setup.ini...
< Back
Next >
Cancel

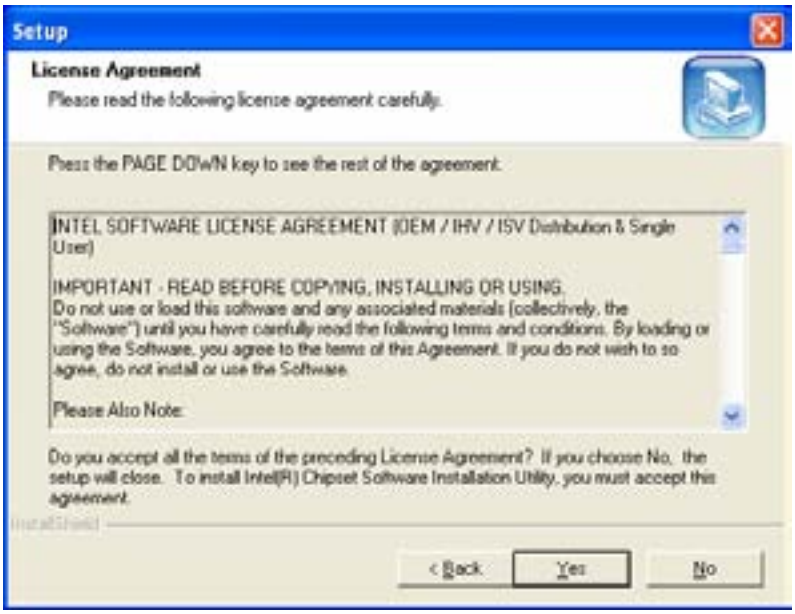
3.3.3 Step 3

Click “Next” when you see the following message.


Setup
Welcome to the InstallShield Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
< Back
Next >
Cancel

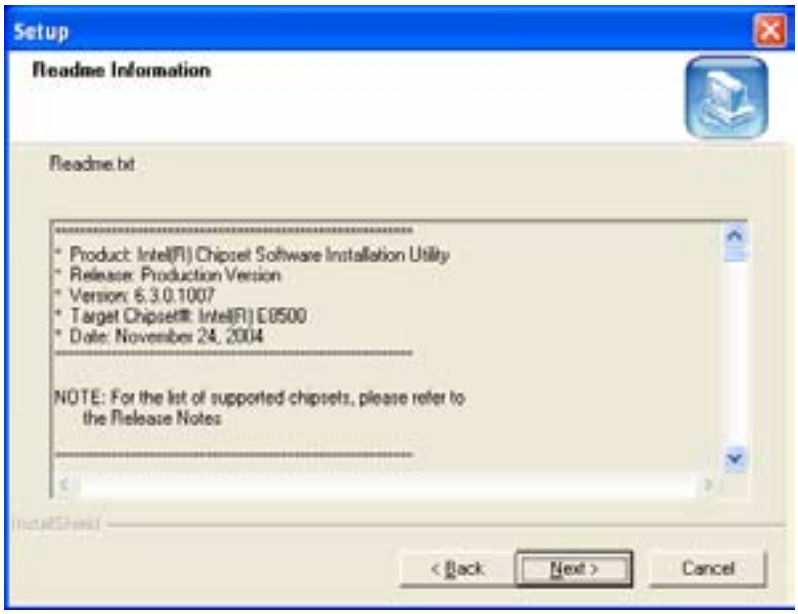
3.3.4 Step 4

Click “Yes” when you see the following message.


Setup
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Intel(R) Chipset Software Installation Utility, you must accept this agreement.
< Back
Yes
No

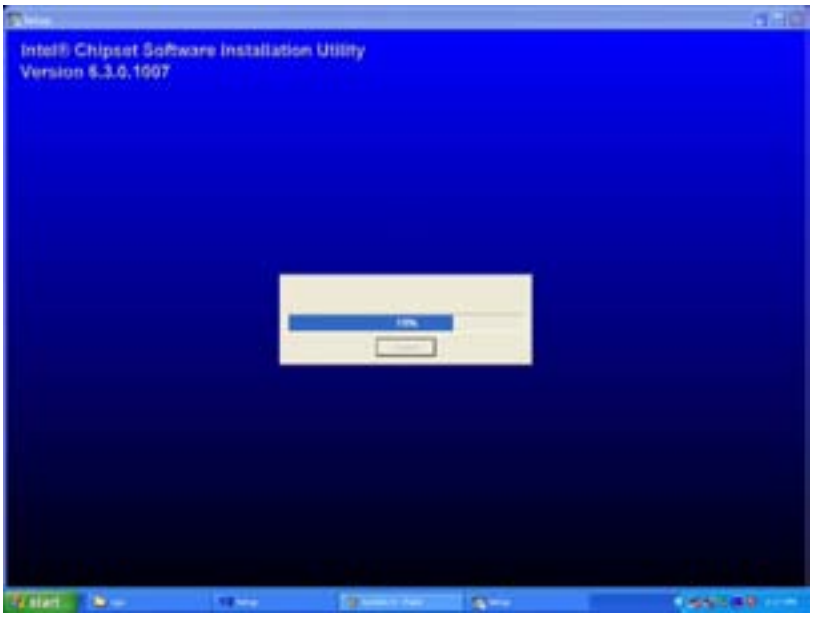
3.3.5 Step 5

Click “Next” when you see the following message.


Setup
Readme Information
Readme.txt
* Product: Intel(R) Chipset Software Installation Utility
* Release: Production Version
* Version: 6.3.0.1007
* Target Chipset(s): Intel(R) E8500
* Date: November 24, 2004
NOTE: For the list of supported chipsets, please refer to the Release Notes
< Back
Next >
Cancel

3.3.6 Step 6

Installation is in progress.



3.3.7 Step 7

When the following message appears, click “Finish” to complete the installation and restart Windows.

Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Intel(R) Chipset Software Installation Utility. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

Chapter 4 VGA/LCD Setup

4.1 Introduction

The zito1300 series come with onboard Intel 852GM chipset for AGP/VGA controller. This supports conventional analog CRT monitors with 64MB frame buffer shared with system memory. The graphics controller can deliver to the CRT display with resolutions up to 1600 x 1200@85-Hz.

4.1.1 CMOS setting for panel type

The zito1300 series system BIOS and the custom drivers are located within a 512kbytes, Flash ROM device. This flash chip holds the system and VGA BIOS together. The display can be configured through CMOS settings. This method minimized the number of chips and different type of panels, please choose "panel type" from the "integrated peripherals" menu in CMOS setting.

4.1.2 Display Type

The zito1300 series are set to be with one CRT monitor as default setting.

4.2 Installation of the VGA Driver

Please read the instructions in this chapter carefully before you attempt installation. The VGA drivers for the zito1300 series are located on the driver CD. Run the supplied SETUP program to install the drivers, don't copy the files manually.

1. The windows illustrations in this chapter are intended as examples only. Please follow the listed steps, and pay attention to the instructions which appear on your screen.

4.2.1 Installation Guide

4.2.1.1 Step 1

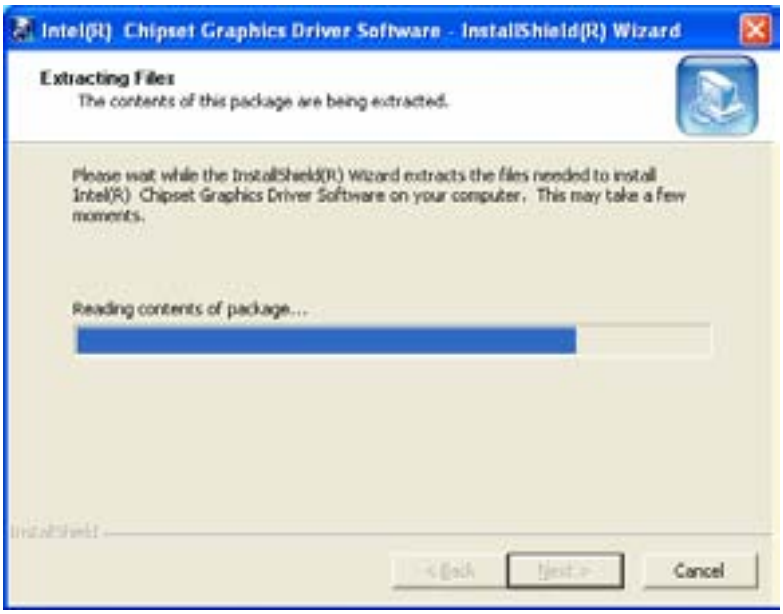
Insert the driver CD into system's CD-ROM drive. Then click the "VGA Driver" icon to start installation.

4.2.1.2 Step 2

Click “Next” to begin VGA driver installation.

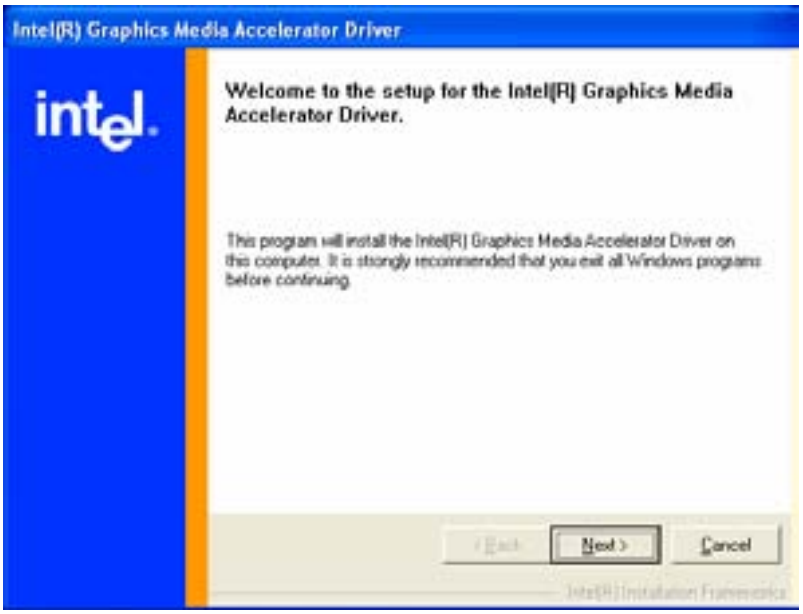
4.2.1.3 Step 3

Installation is in progress.


Intel(R) Chipset Graphics Driver Software - InstallShield(R) Wizard
Extracting files
The contents of this package are being extracted.
Please wait while the InstallShield(R) Wizard extracts the files needed to install Intel(R) Chipset Graphics Driver Software on your computer. This may take a few moments.
Reading contents of package...
InstallShield
< Back
Next >
Cancel

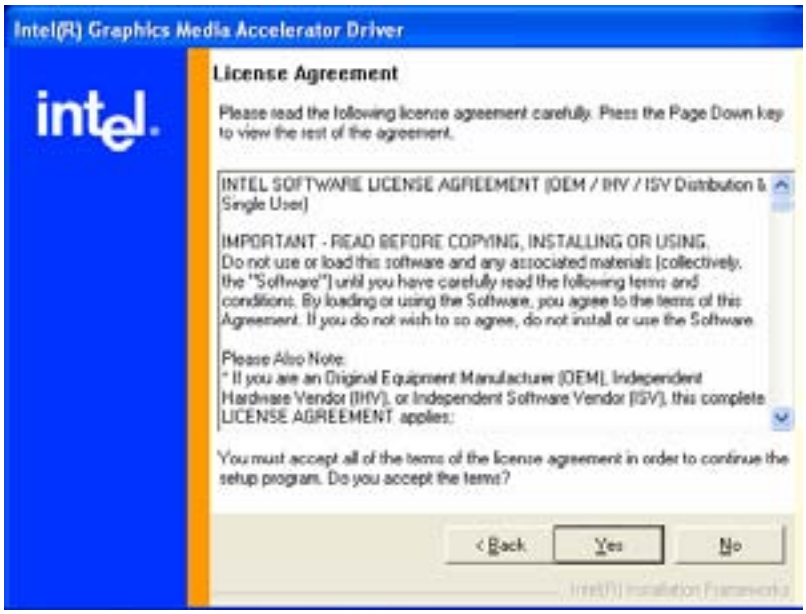
4.2.1.4 Step 4

Click "next" when you see the following message.


Intel(R) Graphics Media Accelerator Driver
intel.
Welcome to the setup for the Intel(R) Graphics Media Accelerator Driver.
This program will install the Intel(R) Graphics Media Accelerator Driver on this computer. It is strongly recommended that you exit all Windows programs before continuing.
< Back
Next >
Cancel
Intel(R) Installation Framework

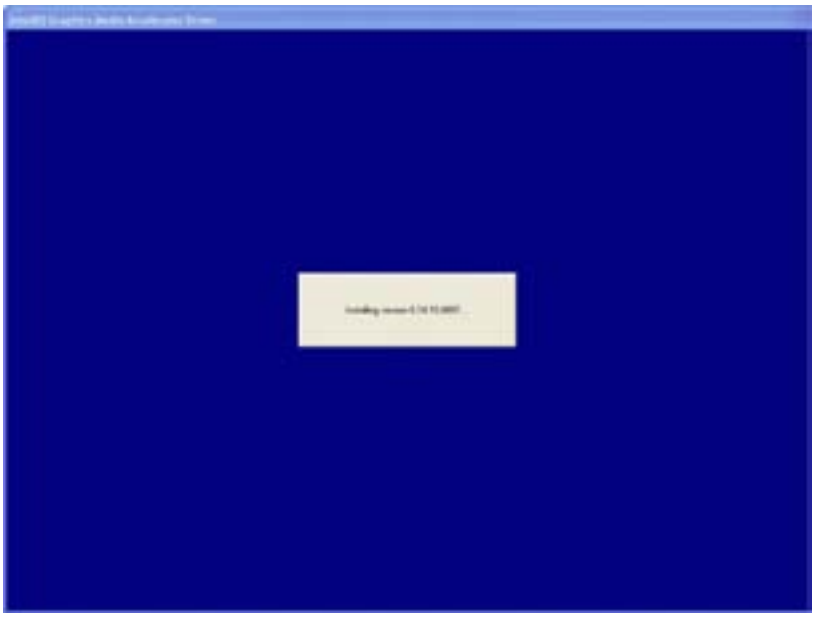
4.2.1.5 Step 5

Click “Yes” when you see the following message.


Intel(R) Graphics Media Accelerator Driver
intel.
License Agreement
Please read the following license agreement carefully. Press the Page Down key to view the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
< Back
Yes
No
Intel(R) Installation Framework

4.2.1.6 Step 6

Installation continues.



4.2.1.7 Step 7

When the following message appears, click “Finish” to complete the installation and restart Windows.

Intel(R) Graphics Media Accelerator Driver
intel.
The setup for the Intel(R) Graphics Media Accelerator Driver is complete.
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish.
< Back
Finish

4.3 Further Information

For further information about the AGP/VGA installation in your zito1300 series, including driver updates, troubleshooting guides and FAQ lists, contact your supplier where you have purchased from or visit the following web resources:
Intel website: www.intel.com

Chapter 5 Audio Setup

5.1 Introduction

The zito1300 series audio features a high-quality stereo sound and the FM music synthesis (also known as ESFM), using the Intel ICH4 audio controller chipset and Realtek AC'97 CODEC. This audio interface can perform record, compress, along with play back voice, sound, and music inside the built-in mixer control.

5.2 Driver Installation

5.2.1 Announcement

Please read the instructions in this chapter carefully before you attempt installation. The audio drivers for the zito1300 series are located on the driver CD. Run the supplied SETUP program to install the drivers, don't copy the files manually.

1. **The windows illustrations in this chapter are intended as examples only. Please follow the listed steps, and pay attention to the instructions which appear on your screen.**

5.2.2 Installation Guide

5.2.2.1 Step 1

Insert the driver CD into system's CD-ROM drive. Then click the "Audio Driver" icon to start installation.

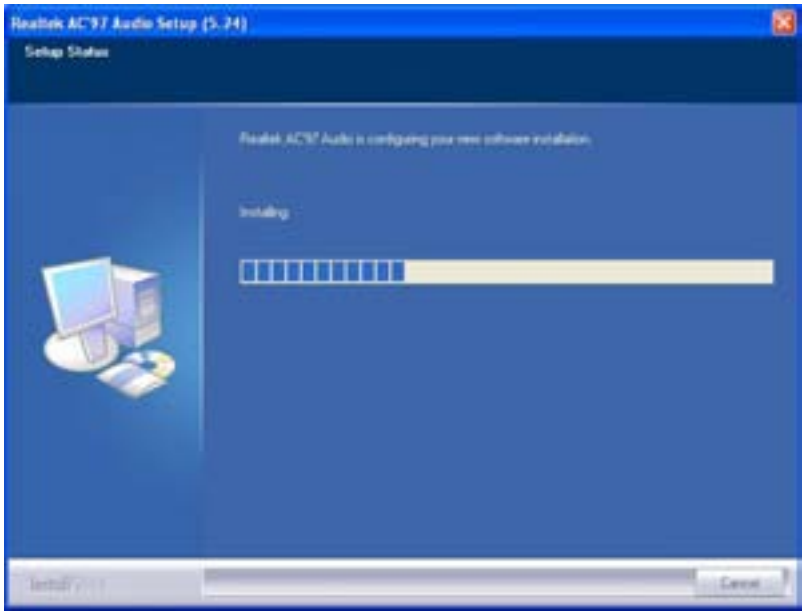
5.2.2.2 Step 2

Click "Next" when you see the following message.

Realtek AC97 Audio - InstallShield Wizard
Extracting Files
The contents of this package are being extracted.
Please wait while the InstallShield Wizard extracts the files needed to install Realtek AC97 Audio on your computer. This may take a few moments.
Reading contents of package...
< Back
Next >
Cancel

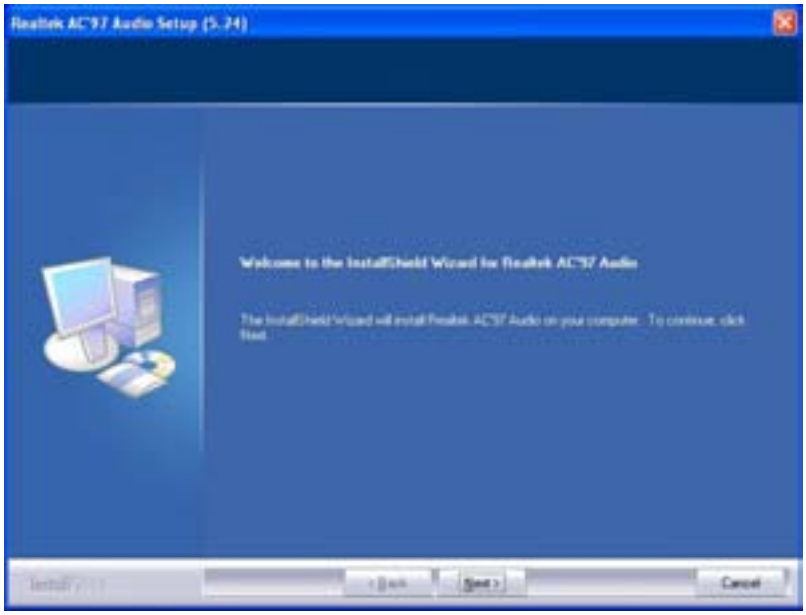
5.2.2.3 Step 3

Installation is in progress.



5.2.2.4 Step 4

Click “Continue Anyway” when you see the following message



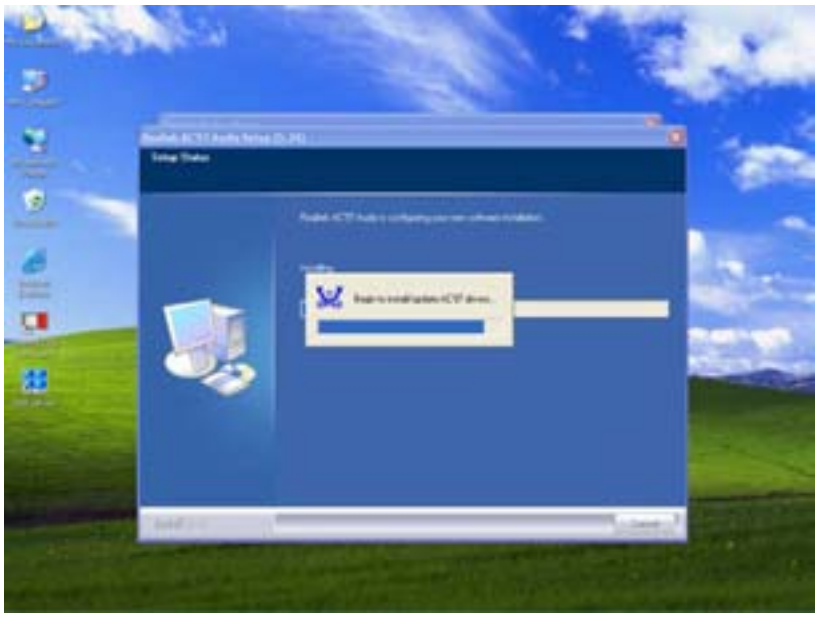
5.2.2.5 Step 5

Installation is in progress.

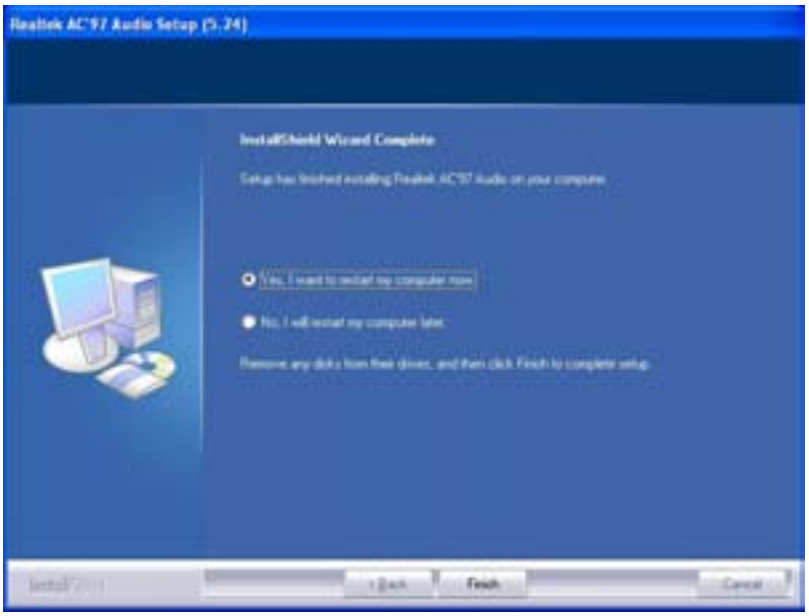
Hardware Installation
The software you are installing for this hardware:
Realtek AC'97 Audio
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

5.2.2.6 Step 6

When the following message appears, click “Finish” to complete the installation and restart Window



5.2.2.7 Step 7



5.3 Further Information

For further information about the audio installation in your zito1300 series, including driver updates, troubleshooting guides and FAQ lists, contact your supplier where you have purchased from or visit the following web resources:
Realtek website: www. realtek.com.tw

Chapter 6 LAN Interface

6.1 Introduction

The zito1300 is equipped with a high performance LAN/Ethernet chipset which is fully compliant with IEEE 802.3u 10/100Base-T CSMA/CD standards. The LAN/Ethernet port provides a standard RJ-45 jack connector with LED indicators on the front side to show its Active/Link status.

6.2 Installation of Ethernet Driver

Please read the instructions in this chapter carefully before you attempt installation. The LAN driver for the zito1300 is located in the driver CD. Run the supplied SETUP program to install the drivers, don't copy the files manually.

1. **The windows illustrations in this chapter are intended as examples only. Please follow the listed steps, and pay attention to the instructions which appear on your screen.**

6.2.1 Installation Guide

6.2.1.1 Step 1

Insert the driver CD into system's CD-ROM drive. Then click the "LAN Driver" icon to start installation.

6.2.1.2 Step 2

Click "I accept the terms in the license agreement" and then click "Next" to start installation.

DriverInstaller - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
INTEL SOFTWARE LICENSE AGREEMENT
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
< Back
Next >
Cancel

6.2.1.3 Step 3

Click “Next” when you see the following message.

DriverInstaller - InstallShield Wizard
Location to Save Files
Where would you like to save your files?
Please enter the folder where you want these files saved. If the folder does not exist, it will be created for you. To continue, click Next.
Save files in folder:
c:\Intel11.1
Change...
< Back
Next >
Cancel

6.2.1.4 Step 4

Installation is in progress.

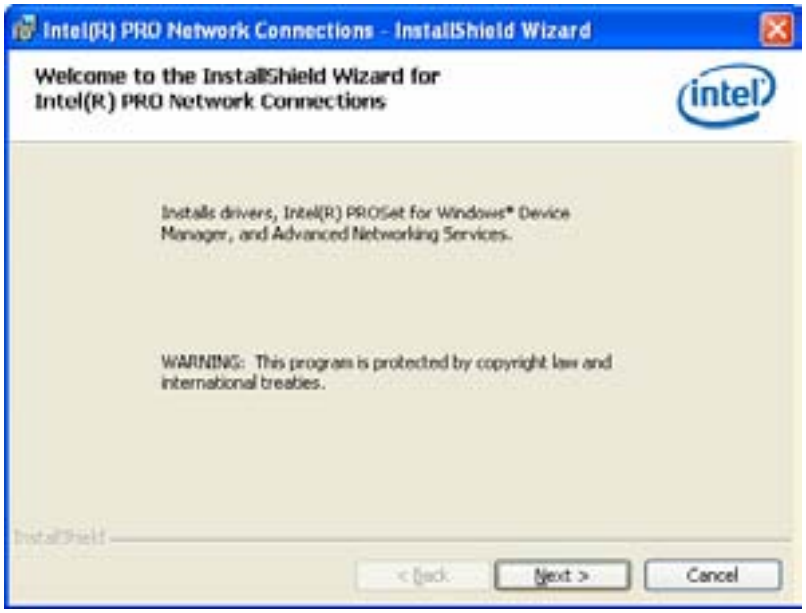
DriverInstaller - InstallShield Wizard
Extracting Files
The contents of this package are being extracted.
Please wait while the InstallShield Wizard extracts the files needed to install DriverInstaller on your computer. This may take a few moments.
Reading contents of package...
< Back
Next >
Cancel

6.2.1.5 Step 5

Click “Install Drivers” when you see the following message.

6.2.1.6 Step 6

Click “Next” when you see the following message.


Intel(R) PRO Network Connections - InstallShield Wizard
Welcome to the InstallShield Wizard for
Intel(R) PRO Network Connections
Installs drivers, Intel(R) PROSet for Windows* Device Manager, and Advanced Networking Services.
WARNING: This program is protected by copyright law and international treaties.
InstallShield
< Back
Next >
Cancel

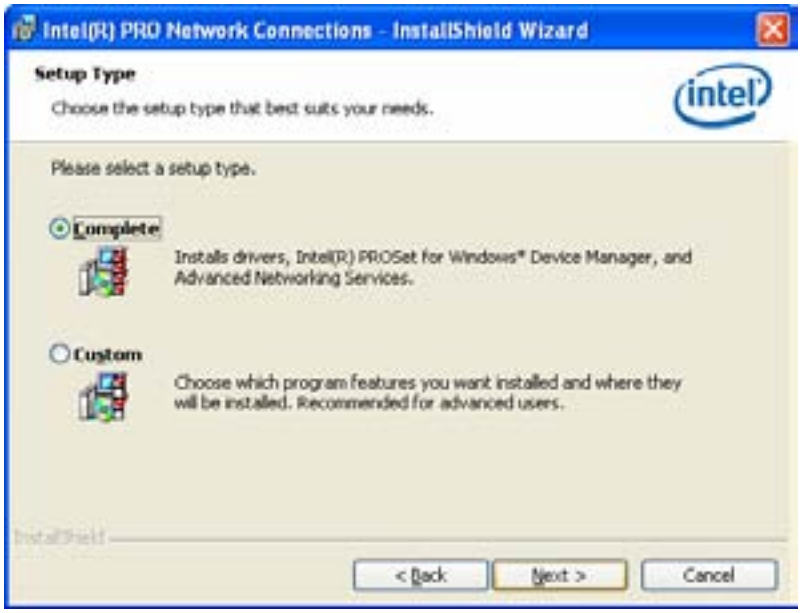
6.2.1.7 Step 7

Click “I accept the terms in the license agreement” and then click “Next” to begin.

Intel(R) PRO Network Connections - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
INTEL SOFTWARE LICENSE AGREEMENT (Final, License)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
LICENSES: Please Note:
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
< Back
Next >
Cancel

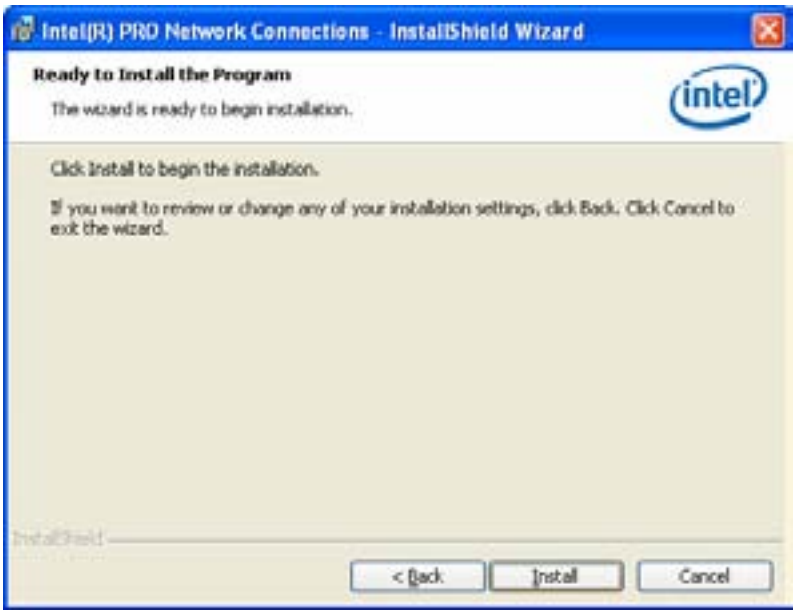
6.2.1.8 Step 8

Click “Complete” and then click “Next” when you see the following message.


Intel(R) PRO Network Connections - InstallShield Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Complete
Installs drivers, Intel(R) PROSet for Windows® Device Manager, and Advanced Networking Services.
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< Back
Next >
Cancel

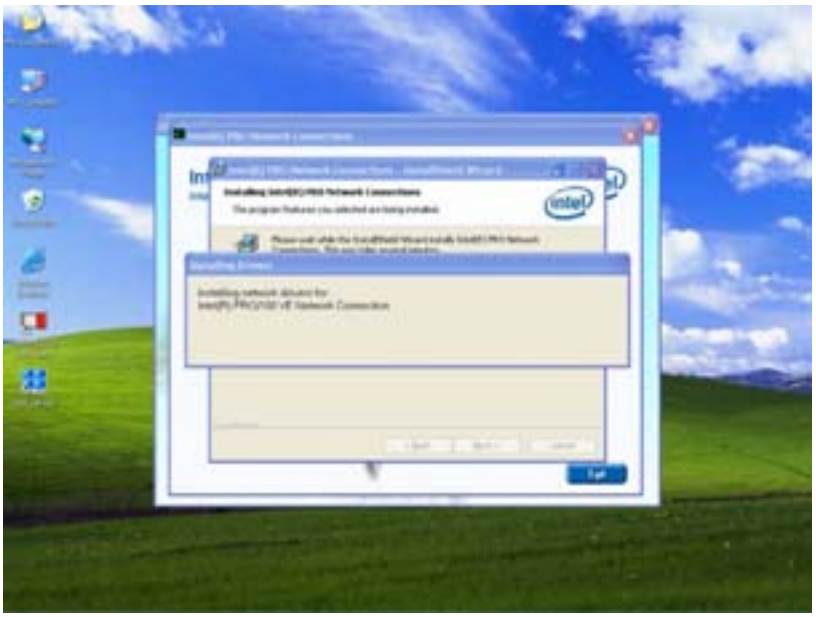
6.2.1.9 Step 9

Click “Install” when you see the following message.


Intel(R) PRO Network Connections - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
intel
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

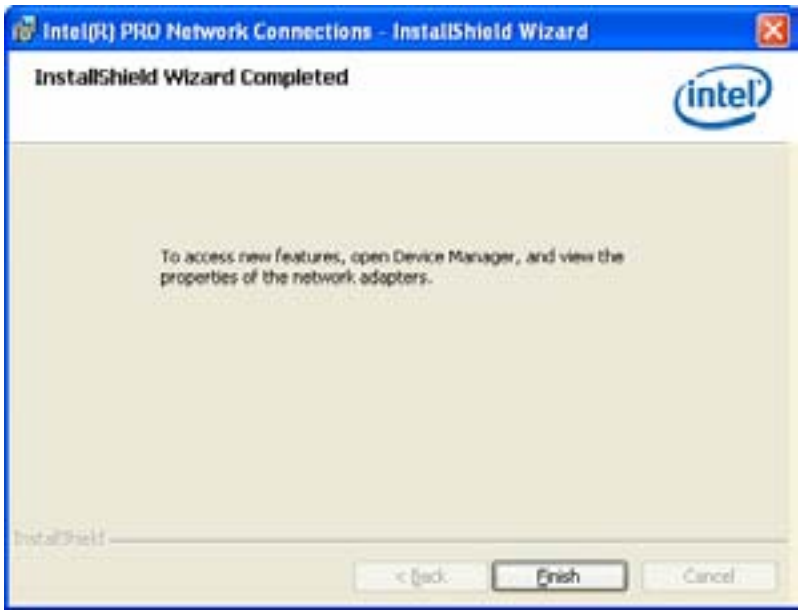
6.2.1.10 Step 10

Installation is in progress.



6.2.1.11 Step 11

When the following message appears, click “Finish” to complete the installation.


Intel(R) PRO Network Connections - InstallShield Wizard
InstallShield Wizard Completed
intel
To access new features, open Device Manager, and view the properties of the network adapters.
< Back
Finish
Cancel

6.3 Further Information

For further information about the LAN installation in your zito1300 series, including driver updates, troubleshooting guides and FAQ lists, contact your supplier where you have purchased from or visit the following web resources:
Intel website: www.intel.com

Chapter 7 Wireless LAN Interface

7.1 Introduction

The zito130xP is equipped with Mini-PCI socket on board which gives you the ability to add additional Wi-Fi interface and brings up the enjoyment of wireless LAN ability. This chapter and driver installation is only suitable for “VIA networking technologies PCI-Cardbus wireless LAN adapter” with product named “VT6655”. If you are not sure about this, please contact your supplier where you have purchased from to clarify with this.

7.2 Installation of Wireless LAN Driver

Before installing the Wireless LAN driver, note the procedures below. Please read the instructions in this chapter carefully before you attempt installation. The wireless LAN drivers for the zito130xP series are located on the driver CD. Run the supplied SETUP program to install the drivers, don’t copy the files manually.

1. **The windows illustrations in this chapter are intended as examples only. Please follow the listed steps, and pay attention to the instructions which appear on your screen.**

7.2.1 Installation Guide

7.2.1.1 Step 1

Insert the driver CD into system's CD-ROM drive. Then click the "WLAN Driver" icon to start installation.

7.2.1.2 Step 2

Installation is in progress.

7.2.1.3 Step 3

When the following message appears, click “OK” to complete the installation.

7.3 Further Information

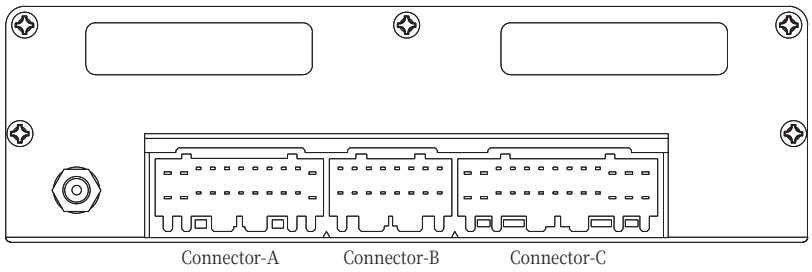
For further information about the WLAN installation in your zito130xP, including driver updates, troubleshooting guides and FAQ lists, contact your supplier where you have purchased from or visit the following web resources:
VIA website: www.via.com

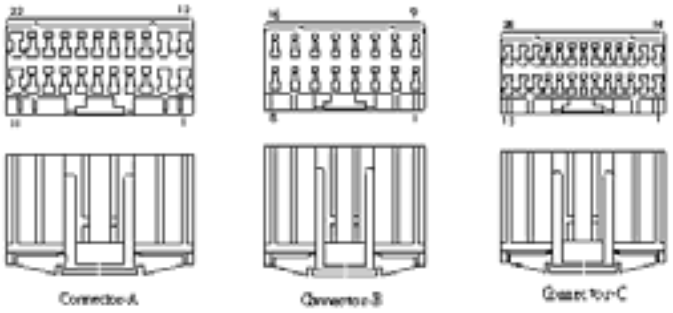
Appendix A

Connectors' Pin Assignment

1 External Connector

1.1 Pin Assignment for MultiLock Connector





1.2 GPIO/Video Connector

Signal	Pin Number of Connector A	
	Zito1304/1304P	Zito1308P
GPIO-1	12	12
GPIO-2	1	1
GPIO-3	13	13
GPIO-4	2	2
Audio-1	15	15
Audio-2	4	4
Audio-3	14	14
Audio-4	3	3
Ground	5	5
Video In-1	20	20
Video In-2	9	18
Video In-3	19	9
Video In-4	8	7
Video In-5	N/C	19
Video In-6	N/C	17
Video In-7	N/C	8
Video In-8	N/C	6
Video Ground	16	16
Microphone In	10	10
Audio Line In-R	22	22
Audio Line In-L	11	11
Audio Ground	21	21

NOTE: GPIO is TTL compatible interface.

1.3 LAN (RJ-45) Connector

PIN No#	LAN	Pin No# of Connector B
1	RX -	2
2	RX +	1
3	TX -	9
6	TX +	10
9	ACT LED	3
11	LINK LED	11
10,12	VCC	12

1.4 USB Connector

USB Port		Pin No# of Connector B
PIN No#	Name	PIN
1	USB Power 1	4
2	USB0 -	15
3	USB0 +	16
2	USB1 -	7
3	USB1 +	8
1	USB Power 0	6
2	USB2 -	13
3	USB2 +	5
4	GND	14

1.5 CRT Display Connector (VGA)

PIN No#	Signal	Pin No# of Connector C
1	RED	5
2	GREEN	17
3	BLUE	4
4,9,11,12,15	N/C	N/C
5,6,7,8,10	GND	18
13	H-SYNC	15
14	V-SYNC	16

1.6 Audio Output Connector

Audio Out Connector		Pin No# of Connector C
PIN No#	**Name**	**PIN**
1	Audio Line Out-R	2
2	Audio Line Out-L	1
3	Audio GND	14

1.7 COM1/RS-232 Connector

PIN No#	COM1/RS-232	Pin No# of Connector C
1	DCD	24
2	RxD	23
3	TxD	22
4	DTR	21
5	GND	20
6	DSR	10
7	RTS	9
8	CTS	8
9	RI	7

1.8 Power Source

Power In		Pin No# of Connector C
PIN No#	**Name**	**PIN**
1	12/24V +	12
2	12/24V +	13
3	GND	25
4	GND	26

1.9 Other Connectors

The connectors allow zito1300 series to be connected with other parts of system's components as from the evaluation cables. Problems may encounter during loose or improper connections. Please ensure all connectors are in place and firmly attached.

Component	Location
HDD (IDE) Connector	IDE
Line In	Connector A
Microphone	Connector A
Video Input	Connector A
Audio Input	Connector A
GPIO	Connector A
LAN	Connector B
USB Connector	Connector B
External Power Connector	Connector C
Serial Port	Connector C
VGA Connector	Connector C
Line Out	Connector C

Appendix B

Updating BIOS

The updating procedures as the following:

1. It is recommended that you should copy the utility “AWDFLASH.EXE” in driver CD and BIOS binary files into a floppy disk or a USB disk drive. Alternatively, you can copy these two files into the directory that you have made in hard disk.
2. Restart your computer into MS-DOS mode or command prompt only for windows, then move into the directory where the new BIOS file located and use the utility AWDFLASH.EXE to update the BIOS.
3. Type “AWDFLASH new bios filename” under the prompt.
4. Turn off the power after the system updates the BIOS.
5. Turn on the power again.

Appendix C

Hardware In-Lab Testing Installation Guide

Step 1

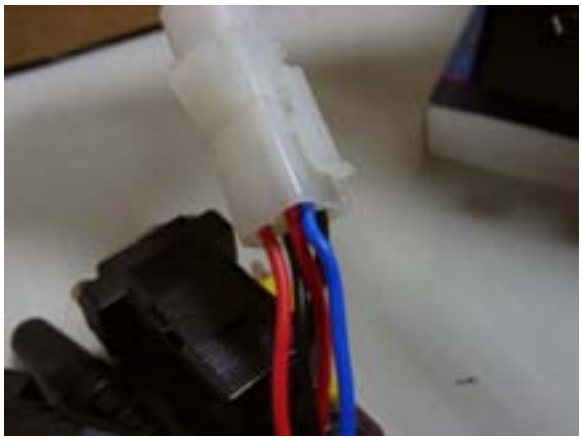
The blue wire is called “ACC Line” which is acting like an On/OFF switch for our zito unit. During the field installation that you would require this ACC line to be connected to the key’s ignition switch. The black and red power wires are connecting directly to 12/24V DC power supply within vehicle.

Step 2

Connecting the power cable (red and black) to the regulated DC power supply and setting the voltage at 11V or 22V accordingly.

Step 3

Insert the blue wire (ACC Line) within one of the red power wire together.



Step 4

Selecting the voltage up to 13V or 26V accordingly from setting in Step2, zito unit should be able to start powering up the system as well as loading up the operating system automatically.

NOTE:

When you have pull off the blue wire from connector. It will lead the system starting to power off as well as preparing operating system shut down automatically.

Auto Power ON (system ON/starting) = ACC attach to the +power cable.

Auto Power OFF (system shutdown) = ACC detach from the +power cable

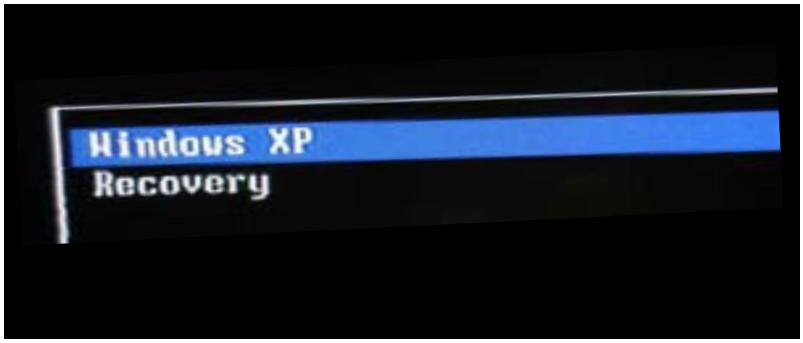
Appendix D

Recovery Scheme

The recovery file is a simple-click solution with self recovery scheme to help users recover zito1300 series main drive from a virus files crash. We offer this function at every time when you restart the operating system. You will see a booting selection with **Windows XP** and **Recovery** on the first booting screen and system will enter to Windows XP operating system in 3 seconds if user does not select **Recovery** by arrow key.

Please follow the steps as below to recover you main drive.

Step 1 Select Recovery by keyboard arrow key and press Enter to execute.



Step 2 Press OK to start recovery process. A warning message will show up to ask you again for recovery confirmation.

Step 3 There's a complete percentage shows from 0 to 100.

Step 4 When the process is completed, there's a confirmation message show up to ask user to restart the system. System should be successful to get into Windows XP environment and perform a clean boot as original status.